

Skor pengukuran kebergunaan perisian kursus matematik berdasarkan faktor penilai

ABSTRACT

The primary purpose of this study was to provide psychometrics evidence of validity and reliability of metriks for evaluating the usefulness of a mathematics courseware (MC) and eventually to construct the usefulness score formula. In this paper the construction of usefulness score is discussed. Based on the theoretical perspective, a hypothesized evaluation model with three factors which were usability, functionality and efficiency and 85 metriks were proposed. The instrument was administered to 620 mathematics teachers in five regions in Malaysia. They were required to explore a MC and complete the questionnaire. Exploratory factor analysis was employed to validate the usefulness construct while confirmatory factor analysis was conducted to develop a structural model by befitting 34 metric with the hypothesis model. T-test and ANOVA suggested that three variables, which were teacher's academic background, computer usage experience and evaluation error, had significant impact to MC usefulness score. From these findings MC usefulness score formula was constructed.

Keyword: Evaluation error; Safeguards; Usefulness metriks; Usefulness model; Usefulness score